Chapter II
UNIVERSITY SETTING AND SECURITY

Before describing the details of the events, it is necessary to understand the setting in which they took place, including the security situation at Virginia Tech at the time of the shootings. This chapter focuses on the physical security of the campus and its system for alerting the university community in an emergency. It also gives a brief background on the campus police department and the university's Emergency Response Plan. The prevention aspect of security—including the identification of people who pose safety threats—is discussed in Chapter IV.

UNIVERSITY SETTING

Virginia Tech occupies a beautiful, sprawling campus near the Blue Ridge Mountains in southwest Virginia. It is a state school known for its engineering and science programs but with a wide range of other academic fields in the liberal arts.

The main campus has 131 major buildings spread over 2,600 acres. The campus is not enclosed; anyone can walk or drive onto it. There are no guarded roads or gateways. Cars can enter on any of 16 road entrances, many of which are not in line of sight of each other. Pedestrians can use sidewalks or simply walk across grassy areas to get onto the campus. Figure 1 shows aerial views of the campus. There is a significant amount of ongoing construction of new buildings and renovation of existing buildings, with associated noise.

On April 16, the campus population was about 34,500, as follows:

26,370	students (9,000 live in dorms)
7,133	university employees (not counting student employees)
1,000	visitors, contractors, transit workers, etc.
34,503	**Total**

CAMPUS POLICE AND OTHER LOCAL LAW ENFORCEMENT

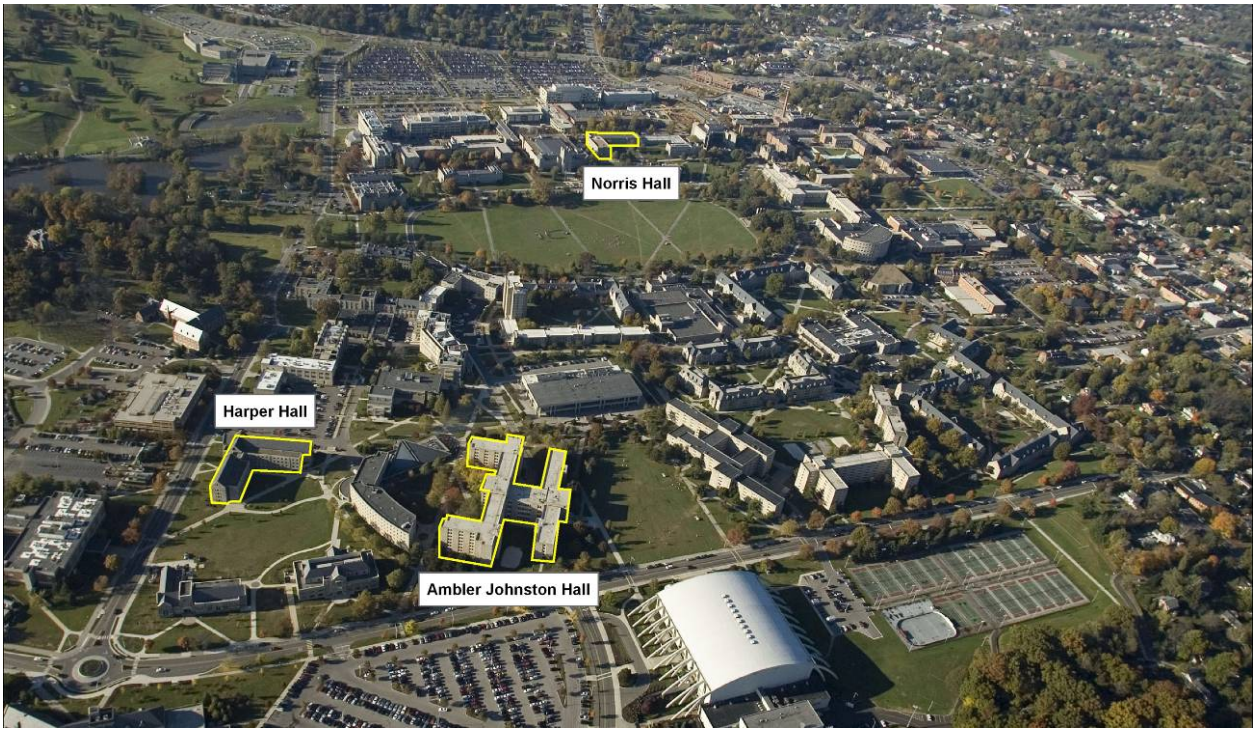
A key element in the security of Virginia Tech is its police department. It is considered among the leading campus police departments in the state. While many campuses employ security guards, the Virginia Tech Police Department (VTPD) is an accredited police force. Its officers are trained as a full-fledged police department with an emergency response team (ERT), which is like a SWAT team.

The police chief reports to a university vice president.

On April 16, the VTPD strength was 35 officers. It had 41 positions authorized but 6 were vacant. The day shift, which comes on duty at 7 a.m., has 5 officers. Additionally, 9 officers work office hours, 8 a.m. to 5 p.m., including the chief, for a total of 14 on a typical weekday morning. On April 16, approximately 34 of the officers came to work at some point during the day.

The campus police could not handle a major event by themselves with these numbers, and so they have entered into a mutual aid agreement with the Blacksburg Police Department (BPD) for immediate response and assistance. They frequently train together, and had trained for an active shooter situation in a campus building before the incident. As will be seen, this preparation was critical.

The VT campus police also have excellent working relationships with the regional offices of the state police, FBI, and ATF. The high level of cooperation was confirmed by each of the federal, state, and local law enforcement agencies that were involved in the events on April 16, and by the rapidity of coordination of their response to the incident and the investigation that followed. Training together, working cases together, and



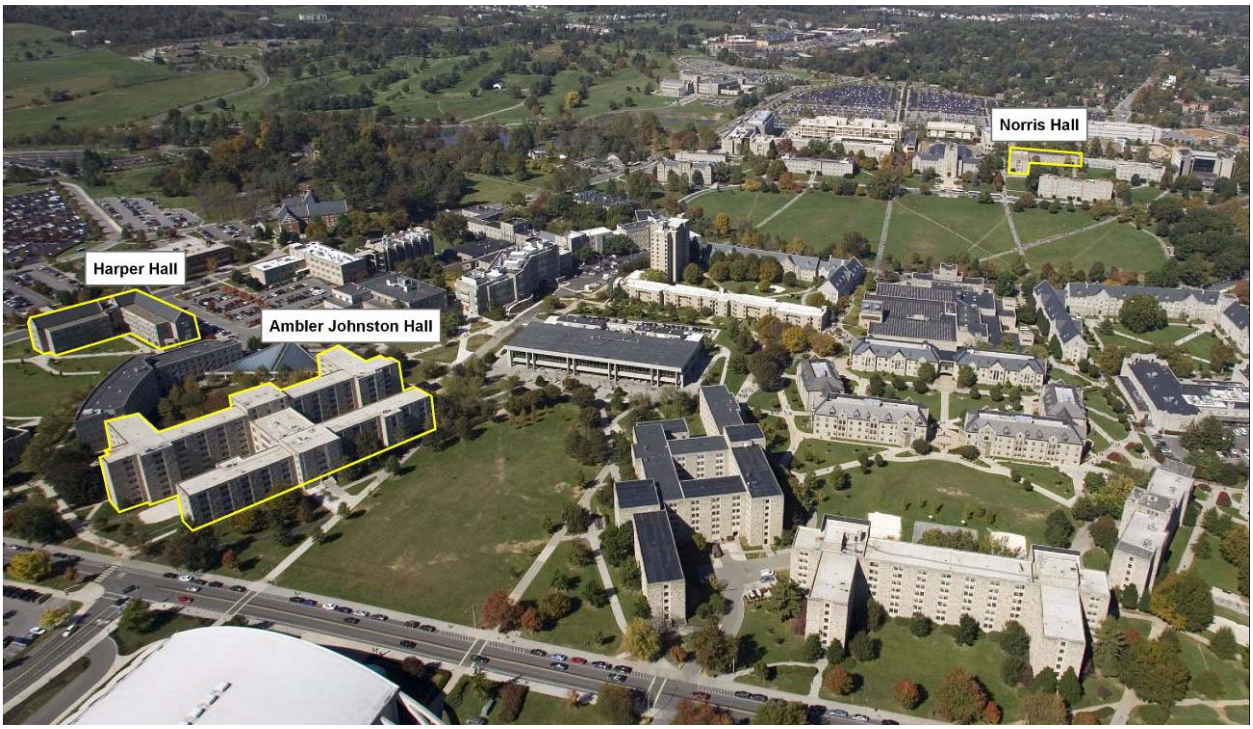


Figure 1. Aerial Views of Virginia Tech Campus

knowing each other on a first-name basis can be critical when an emergency occurs and a highly coordinated effort is needed.

The purpose of the Virginia Tech campus police is stated in the university's Emergency Response Plan as follows: "The primary purpose of the VTPD is to support the academics through maintenance of a peaceful and orderly community and through provision of needed general and emergency services." Although some do not consider police department mission statements of much importance versus how they actually operate, the mission statement may affect their role by indicating priorities. For example, it may influence a decision as to whether the university puts minimizing disruption to the educational process first and acting on the side of precaution second. There are many crimes and false alarms such as bomb threats on campus, and it is often difficult to make the decision on taking precautions that are disruptive. The police mission statement also may affect availability of student information. Explicitly including the police under the umbrella of university officials may allow them to access student records under Family Educational Rights and Privacy Act (FERPA) regulations.

Several leaders of the campus police chiefs of Virginia commented that they do not always have adequate input into security planning and threat assessment or the authority to access important information on students.

BUILDING SECURITY

The residence halls on campus require placing a student or staff keycard in an electronic card reader in order to enter between 10:00 p.m. and 10:00 a.m. A student access card is valid only for his or her own dormitory and for the mailbox area of another dormitory if one's assigned mailbox is there.

Many other school buildings are considered public spaces and are open 24 hours a day. The university encourages students to use the facilities for classwork, informal meetings, and officially sanctioned clubs and groups.

Most classrooms, such as those in Norris Hall, have no locks. Staff offices generally do have locks, including those in Norris Hall.

There are no guards at campus buildings or cameras at the entrances or in hallways of any buildings. Anyone can enter most buildings. It is an open university.

Some buildings have loudspeaker systems intended primarily for use of the fire department in an emergency. They were not envisioned for use by police. They can only be used by someone standing at a panel in each building and cannot be accessed for a campus-wide broadcast from a central location.

This level of security is quite typical of many campuses across the nation in rural areas with low crime rates. Some universities are partially or completely fenced, with guards at exterior entrances; usually these are in urban areas. Some universities have guards at the entrance to each building and screen anyone coming in without student or staff identification, again usually on urban campuses. Some universities have locks on classroom doors, but they typically operate by key from the hallway. They are intended to keep students and strangers out when they are not in use and often cannot be locked from the inside.

A few universities (e.g., Hofstra University in Nassau County, NY) now have the ability to lock the exterior doors of some or all buildings at the push of a button in a central security office. Most require manual operation of locks. Virginia Tech would have to call people in scores of buildings or send someone to the buildings to lock their outside doors (except for dormitories between 10 p.m. and 10 a.m. when they are locked automatically).

Many levels of campus security existed at colleges and universities across Virginia and the nation on April 16. A basic mission of institutions of higher education is to provide a peaceful, open campus setting that encourages freedom of movement and expression. Different institutions provide more or less security, often based on their locations (urban, suburban, or rural), size and complexity (from research universities to small private colleges), and resources. April 16 has become the 9/11 for colleges and universities. Most have reviewed their security plans since then. The installation of security systems already planned or in progress has accelerated, including those at Virginia Tech.

Although the 2004 General Assembly directed the Virginia State Crime Commission to study campus safety at Virginia's institutions of higher education (HJR 122), the report issued December 31, 2005, did not reflect the need for urgent corrective actions. So far as the panel is aware, there was no outcry from parents, students, or faculty for improving VT campus security prior to April 16. Most people liked the relaxed and open atmosphere at Virginia Tech. There had been concern the previous August about an escaped convict and killer named William Morva whose escape in the VT vicinity unnerved many people. Also, some campus assaults led some students to want to arm themselves. However, if the April 16 incident had not occurred, it is doubtful that security issues would be on the minds of parents and students more than at other universities, where the most serious crimes tend to be rapes, assaults, and dangerous activity related to alcohol or drug abuse by students. These issues were addressed by the State Crime Commission Report and were given an average level of attention at Virginia Tech.

CAMPUS ALERTING SYSTEMS

Virginia Tech was in the process of upgrading its campus-wide alerting system in spring 2007.

Existing System – Virginia Tech had the capability on April 16 to send messages to the student body, faculty, and other staff via a broadcast e-mail system. The associate vice president for University Relations had the authority and capability to send a message from anywhere that was connected to the web. Almost every student and faculty member on campus has a computer and e-mail address (estimated at 96 percent by the university). Most but not all student computers are portable. Many are carried to classes. However, an e-mail message sent by the university may not get read by every user within minutes or even hours. The e-mail system had 36,000 registered e-mail addresses. Distribution of an emergency message occurred at a rate of about 10,000 per minute.

The university also has a web site that it uses to post emergency warnings, mostly for weather events. The system has high-volume capacity. (As events unfolded on April 16, the VT web site was receiving 148,000 visits per hour.) An emergency message can be put in a box on the web site that anyone reaching the site would see no matter what they were looking for.

The university also has contacts with every local radio and TV station. The Virginia Tech associate vice president for University Relations has a code by which he can send emergency messages to the stations that could be played immediately. This process could take 20 minutes or so because each station has its own code to validate the sender. The validation codes are necessary because students or members of the public could send spoof messages to the media as a prank. The public media are used for the occasional weather emergencies, and the campus community is trained to tune in to get further information.

An estimated 96 percent of students at Virginia Tech carry cell phones according to the university. Most bring them to classes or wherever else they go. A text message to cell phones probably will reach more students faster than an e-mail message because the devices are more portable and can be rung. But some are forgotten, turned

off, or intentionally not carried. The university was still in the process of installing a text messaging system on April 16 and had no way to send a message to all cell phones.

Personal digital assistants (or PDAs) such as Blackberries are used by fewer students and faculty than cell phones because they are more expensive and are not as capable as computers. They have the capacity to receive e-mails and would be treated either as a computer or as a phone or both, depending on how it is registered.

The university also has a broadcast phone-mail system that allows it to send a phone message to all phone numbers registered with its messaging system. VT used this system to send messages to all faculty offices and some students on April 16. Students and faculty must voluntarily register their phones with this system if they want to be notified. It takes time to reach all the phones; 11 separate actions are required to send a broadcast message to all registered numbers, said the associate vice president for University Relations. It is not a useful approach when time is critical.

A university switchboard with up to four operators is working during normal business hours. It can handle hundreds of calls per hour.

To augment the range of messaging systems it had available, the university was in the process of installing six outdoor loudspeakers to make emergency announcements. Some are mounted on buildings and others on poles, as shown in Figure 2. They can be used for either a voice message or an audible alarm (such as a siren). Four had been installed and were used on April 16, but they did not play a significant role in this incident. (The announcement was made after the 9:05 a.m. class period in which the mass shooting had already started.)

As part of its emergency planning, the university has another system in place as a last-ditch resort—using resident advisors in dorms and floor wardens in some older classroom and office

Figure 2. One of the Six Sirens Being Installed on Virginia Tech Campus

buildings to personally spread a warning. In Norris Hall, for example, the chairman of the Engineering Mechanics Department, whose office was on the second floor, said he had been issued a bullhorn to make announcements and was instructed to rap on classroom and office doors to alert people if there was an emergency and other notification systems failed, if a personal approach was needed to convey safety information, or if an evacuation or sheltering in place was required.

New Unified Campus Alerting System – In spring 2007, Virginia Tech was in the process of installing a unified, multimedia messaging system to be completed before the next semester. It would allow university officials to send an emergency message that would flow in parallel to computers, cell phones, PDAs, and telephones. The message could be sent by anyone who is registered in the system as having authority to send one, using a code word for validation. The president of the university or associate vice president of University Relations

can be anywhere and send a message to everyone—all that is needed is an Internet connection.

Students must be registered with the new system to receive messages. A student can provide a mobile phone number, e-mail address(es), or instant messaging system to be contacted in an emergency. Parents' numbers can be included. All students and staff are encouraged but not required to register with the new system. Each user can set the priority order in which their devices are to be called. The message will cascade through the hierarchy set by each user until it gets answered.[1] This system has the enormous advantage of transmitting a message to the entire university community in less than a minute.

For the Virginia Tech community of about 35,000 users, the system will cost $33,000 a year to operate and no out-of-pocket expense to start. However, it takes considerable staff time to select a system and then oversee its startup. The operating cost is a function of the bandwidth used and the frequency of messages. The more people and devices on the system and the more messages sent per year, the higher the cost. Initially, Virginia Tech is planning to use the system only for emergency messages. Other schools have started using such systems for more routine purposes such as sending information about special events on campus and administrative information, at an extra charge. Virginia Tech was willing to share the criteria it used in its selection of a messaging system (Appendix E). Several competing commercial options have excellent capabilities. Some are only suitable for small schools. Universities and colleges need to balance their needs and the system capability versus costs.

Message Content and Authorization – A critical part of security is not only having the technical communication capability of reaching students and staff quickly, but also planning what to say and how quickly to say it. Pursuant to its Emergency Response Plan in effect on April 16, the Virginia Tech Policy Group and the police chief could authorize sending an emergency message to all students and staff. Typically, the police chief would make a decision about the timing and content of a message after consultation with the Policy Group, which is comprised of the president and several other vice presidents and senior officials. This process of having the Policy Group decide on the message was used during the April 16 incidents. However, while the Virginia Tech campus police had the authority to send a message, they did not have the technical means to do so. Only two people, the associate vice president for University Relations and the director of News and Information, had the codes to send a message. The police could not access the alerting system to send a message. . The police had to contact the university leadership on the need and proposed content of a message. As a matter of course, the police would usually be consulted if not directly involved in the decision regarding the sending of an alert for an emergency.

There are no preset messages for different types of emergencies, as some public agencies have in order to speed crafting of an emergency message. All VT messages are developed for the particular incident.

The timing and content of the messages sent by the university are one of the major controversies concerning the events of April 16. (Chapter VIII addresses the double homicide at West Ambler Johnston residence hall and the messaging decisions that followed).

EMERGENCY RESPONSE PLAN

The university's Emergency Response Plan deals with preparedness and response to a variety of emergencies, but nothing specific to shootings. The version in effect on April 16 was about 2 years old. Emergencies such as weather

[1] A system being developed sends a message to anyone within range of a tower or set of towers. It does not matter who you are or whether you have "registered"; if you have a cell phone and are in range, you get the message.

problems, fires, and terrorism were in the fore of VT emergency planning pre-April 16.[2]

The plan addresses different levels of emergencies, designated as levels 0, I, II, and III. The Norris Hall event was level III, the highest, based on the number of lives lost, the physical and psychological damage suffered by the injured, and the psychological impact on a very large number of people.

The plan calls for an official to be designated as an emergency response coordinator (ERC) to direct a response. It also calls for the establishment of an emergency operations center (EOC). Satellite operations centers may be established to assist the ERC. As will be discussed in describing the response to the events, there were multiple coordinators and multiple operations centers but not a central EOC on April 16.

Two key decision groups are identified in the Emergency Response Plan: the Policy Group and the Emergency Response Resources Group. The Policy Group is comprised of nine vice presidents and support staff, chaired by the university president. The Policy Group deals with procedures to support emergency operations and to determine recovery priorities. In the events of April 16, it also decided on the messages sent and the immediate actions taken by the university after the first incident as well as the second mass shooting. The Policy Group sits above the emergency coordinator for an incident. It does not include a member of the campus police, but the campus police are usually asked to have a representative at its meetings.

The second key group, the Emergency Response Resources Group (ERRG), includes a vice president designated to be in charge of an incident, police officials, and others depending on the nature of the event. It is to ensure that the resources needed to support the Policy Group and needs of the emergency are available. The ERRG is organized and directed by the emergency response coordinator. The ERRG is supposed to meet at the EOC. Decisions made by these groups and their members on April 16 are addressed in the remainder of the report, as the event is described.

The VT Emergency Response Plan does not deal with prevention of events, such as establishing a threat assessment team to identify classes of threats and to assess the risk of specific problems and specific individuals. There are threat assessment models used elsewhere that have proven successful. For example, at two college campuses in Virginia, the chief operating officer receives daily reports of all incidents to which law enforcement responded the previous day, including violation of the student conduct code up to criminal activity. This information is then routinely shared with appropriate offices which are responsible for safety and health on campus.

KEY FINDINGS

The Emergency Response Plan of Virginia Tech was deficient in several respects. It did not include provisions for a shooting scenario and did not place police high enough in the emergency decision-making hierarchy. It also did not include a threat assessment team. And the plan was out of date on April 16; for example, it had the wrong name for the police chief and some other officials.

The protocol for sending an emergency message in use on April 16 was cumbersome, untimely, and problematic when a decision was needed as soon as possible. The police did not have the capability to send an emergency alert message on their own. The police had to await the deliberations of the Policy Group, of which they are not a member, even when minutes count. The Policy Group had to be convened to decide whether to send a message to the university community and to structure its content.

The training of staff and students for emergencies situations at Virginia Tech did not include shooting incidents. A messaging system works more effectively if resident advisors in dormitories, all faculty, and all other staff from janitors

[2] Appendix F has an example of the "active shooter" part of the University of Virginia's plan, and something similar should be included in the Virginia Tech plan.

to the president have instruction and training for coping with emergencies of all types.

It would have been extremely difficult to "lock down" Virginia Tech. The size of the police force and absence of a guard force, the lack of electronic controls on doors of most buildings other than residence halls, and the many unguarded roadways pose special problems for a large rural or suburban university. The police and security officials consulted in this review did not think the concept of a lockdown, as envisioned for elementary or high schools, was feasible for an institution such as Virginia Tech.

It is critical to alert the entire campus population when there is an imminent danger. There are information technologies available to rapidly send messages to a variety of personal communication devices. Many colleges and universities, including Virginia Tech, are installing such campus-wide alerting systems. Any purchased system must be thoroughly tested to ensure it operates as specified in the purchase contract. Some universities already have had problems with systems purchased since April 16.

An adjunct to a sophisticated communications alert system is a siren or other audible warning device. It can give a quick warning that something is afoot. One can hear such alarms regardless of whether electronics are carried, whether the electronics are turned off, or whether electric power (other than for the siren, which can be self-powered) is available. Upon sounding, every individual is to immediately turn on some communication device or call to receive further instructions. Virginia Tech has installed a system of six audible alerting devices of which four were in place on April 16. Many other colleges and universities have done something similar.

No security cameras were in the dorms or anywhere else on campus on April 16. The outcome might have been different had the perpetrator of the initial homicides been rapidly identified. Cameras may be placed just at entrances to buildings or also in hallways. However, the more cameras, the more intrusion on university life.

Virginia Tech did not have classroom door locks operable from the inside of the room. Whether to add such locks is controversial. They can block entry of an intruder and compartmentalize an attack. Locks can be simple manually operated devices or part of more sophisticated systems that use electromechanical locks operated from a central security point in a building or even university-wide. The locks must be easily opened from the inside to allow escape from a fire or other emergency when that is the safer course of action. While adding locks to classrooms may seem an obvious safety feature, some voiced concern that locks could facilitate rapes or assaults in classrooms and increase university liability. (An attacker could drag someone inside a room at night and lock the door, blocking assistance.) On the other hand, a locked room can be a place of refuge when one is pursued. On balance, the panel generally thought having locks on classroom doors was a good idea.

Shootings at universities are rare events, an average of about 16 a year across 4,000 institutions. Bombings are rarer but still possible. Arson is more common and drunk driving incidents more frequent yet. There are both simple and sophisticated improvements to consider for improving security (besides upgrading the alerting system). A risk analysis needs to be performed and decisions made as to what risks to protect against.

There have been several excellent reviews of campus security by states and individual campuses (for example, the states of Florida and Louisiana, the University of California, and the University of Maryland). The Commonwealth of Virginia held a conference on campus security on August 13, 2007.

The VTPD and BPD were well-trained and had conducted practical exercises together. They had undergone active shooter training to prepare for the possibility of a multiple victim shooter.

The entire police patrol force must be trained in the active shooter protocol, because any officer may be called upon to respond.

It was the strong opinion of groups of Virginia college and university presidents with whom the panel met that the state should not impose required levels of security on all institutions, but rather let the institutions choose what they think is appropriate. Parents and students can and do consider security a factor in making a choice of where to go to school.

Finally, the panel found that the VTPD statement of purpose in the Emergency Response Plan does not reflect that law enforcement is the primary purpose of the police department.

RECOMMENDATIONS

EMERGENCY PLANNING

II-1 Universities should do a risk analysis (threat assessment) and then choose a level of security appropriate for their campus. How far to go in safeguarding campuses, and from which threats, needs to be considered by each institution. Security requirements vary across universities, and each must do its own threat assessment to determine what security measures are appropriate.

II-2 Virginia Tech should update and enhance its Emergency Response Plan and bring it into compliance with federal and state guidelines.

II-3 Virginia Tech and other institutions of higher learning should have a threat assessment team that includes representatives from law enforcement, human resources, student and academic affairs, legal counsel, and mental health functions. The team should be empowered to take actions such as additional investigation, gathering background information, identification of additional dangerous warning signs, establishing a threat potential risk level (1 to 10) for a case, preparing a case for hearings (for instance, commitment hearings), and disseminating warning information.

II-4 Students, faculty, and staff should be trained annually about responding to various emergencies and about the notification systems that will be used. An annual reminder provided as part of registration should be considered.

II-5 Universities and colleges must comply with the Clery Act, which requires timely public warnings of imminent danger. "Timely" should be defined clearly in the federal law.

CAMPUS ALERTING

II-6 Campus emergency communications systems must have multiple means of sharing information.

II-7 In an emergency, immediate messages must be sent to the campus community that provide clear information on the nature of the emergency and actions to be taken The nitial messages should be followed by update messages as more information becomes known.

II-8 Campus police as well as administration officials should have the authority and capability to send an emergency message. Schools without a police department or senior security official must designate someone able to make a quick decision without convening a committee.

POLICE ROLE AND TRAINING

II-9 The head of campus police should be a member of a threat assessment team as well as the emergency response team for the university. In some cases where there is a security department but not a police department, the security head may be appropriate.

II-10 Campus police must report directly to the senior operations officer responsible for emergency decision making. They should be part of the policy team deciding on emergency planning.

II-11 Campus police must train for active shooters (as did the Virginia Tech Police Department). Experience has shown that waiting for a SWAT team often takes too long. The

best chance to save lives is often an immediate assault by first responders.

II-12 The mission statement of campus police should give primacy to their law enforcement and crime prevention role. They also must to be designated as having a function in education so as to be able to review records of students brought to the attention of the university as potential threats. The lack of emphasis on safety as the first responsibility of the police department may create the wrong mindset, with the police yielding to academic considerations when it comes time to make decisions on, say, whether to send out an alert to the students that may disrupt classes. On the other hand, it is useful to identify the police as being involved in the education role in order for them to gain access to records under educational privacy act provisions.

Specific findings and recommendations on police actions taken on April 16 are addressed in the later chapters.